Index

ABBREVIATIONS

p paper, address or lecture
d discussion on a paper
a abstract of paper or address
e errata

IEE Proceedings Part C
Generation, Transmission and Distribution
Vol. 137, 1990

Author index

A

Abadina, O.O., and Berg, G.J. Identifying electrically weak and strong segments of a power system from a voltage stability viewpoint p205
Agarwal, S.K., and Billinton, R. see Billinton, R.
Aggarwal, R.K., and Johns, A.T. Digital differential relaying scheme for teed circuits based on voltage and current signal comparison p414
Agrawal, P., and Johns, A.T. see Johns, A.T.
Ahsan, Q., and Bhuiyan, M.R. New approach for simulating an energy limited hydro unit p359
Aitchison, P., Salgado, R., and Brameller, A. see Salgado, R.
Al-Bahrani, A.H., and Malik, N.H. see Malik, N.H.
Ametani, A., Van Dommelen, D., and Utsumi, I. Study of super-bundle and low-reactance phasings on untransposed twin-circuit lines p245
Ametani, A., and Imamura, T. see Imamura, T.
Arienti, V.L., and Leite da Silva, A.M. see Leite da Silva, A.M.
Auckland, D.W., Kabir, S.M.L., and Shuttleworth, R. Generator model for Power system studies p383
Azzam, M. Decomposed numerical observability investigation suitable for parallel processor implementation p335

B

Berg, G.J., and Abadina, O.O. see Abadina, O.O.
Betancourt, R. Estimation of parameters in transient stability output p315
Bhuiyan, M.R., and Ahsan, Q. see Ahsan, Q.
Billinton, R., and Agarwal, S.K. Examination of severe contingencies in a small area of a large composite power system using adequacy equivalents p107
Billinton, R., and Chowdhury, A. Generation adequacy impacts of cogeneration sources p73
Billinton, R., and Chowdhury, N. see Chowdhury, N.
Blez, B., Gauthier, J., and Koch, D. Statistical processing of chopped currents and overvoltages in two types of sulphur hexafluoride breaker technology p63
Brameller, A., Salgado, R., and Aitchison, P. see Salgado, R.

C

Chen, B.-K., Chen, M.-S., Shoults, R.R., and Liang, C.-C. Hybrid three phase load flow p177
Chen, K.-K., Hsu, Y.-Y., Lee, Y.-S., Jien, J.-D., Liang, C.C., Lai, T.-S., and Lee, T.-E. see Hsu, Y.-Y.
Chen, M.-S., Chen, B.-K., Shoults, R.R., and Liang, C.-C. see Chen, B.-K.
Cheng, C.-H., and Hsu, Y.-Y. see Hsu, Y.-Y.
Cheng, C.-H., and Hsu, Y.-Y. Application of a power system stabiliser and a static VAR controller to a multimachine power system p8
Cheung, H.N., and Wong, K.P. see Wong, K.P.
Choi, S.S. Field testing of a long radial transmission system and verification of computer simulation results p194
Chowdhury, A., and Billinton, R. see Billinton, R.
Chowdhury, N., and Billinton, R. Interruptible load considerations in spinning reserve assessment of isolated and interconnected generating systems p159
Chyn, C., and Tsao, T.P. see Tsao, T.P.
Coowar, F., and Magdy, M.A. see Magdy, M.A.
Cudworth, C.J., and Smith, J.R. Steam turbine generator shaft torque transients: a comparison of simulated and test results p327

D

De araújo, C.S., and de Castro, J.C. Application of power system stabilisers in a plant with identical units p453
De castro, J.C., and de Araújo, C.S. see De araújo, C.S.
De Martinis, V., Gagliardi, F., Losi, A., Mangoni, V., and Rossi, F. Optimal load flow for electrical power systems with multiterminal HVDC links p139
DiLecce, F., and Lattarulo, F. see Lattarulo, F.
Dickinson, J., Kamwa, I., and Viarouge, P. see Kamwa, I.

E

El-Hawary, M.E., and Mbamalu, G.A.N. Hydrothermal stochastic optimal power dispatch: A Newton's based approach p213
El-Saidy, M., and Farghal, S.A. see Farghal, S.A.

F

Farghal, S.A., Kandil, M.S., and Hasanin, N.E. see Kandil, M.S.
Farghal, S.A., Kandil, M.S., and Hasanin, N.E. see Kandil, M.S.
Farghal, S.A., and El-Saidy, M. A modified decoupled linear programming technique for power system state estimation p239
Farret, F.A., and Freris, L.L. Minimisation of uncharacteristic harmonics in HVDC convertors through firing angle modulation p45
Feliachi, A. Optimal siting of power system stabilisers p101
Fong, C.C, Wong, T.Y., and Tsai, D.T. Evaluating the approximate probability distributions of load point reliability indices in power distribution networks p174
Freris, L.L., and Farret, F.A. see Farret, F.A.

G

Gagliardi, F., De Martinis, V., Losi, A., Mangoni, V., and Rossi, F. see De Martinis, V.
Gauthier, J., Blez, B., and Koch, D. see Blez, B.

H

Haque, M.H., and Rahim, A.H.M.A. Identification of coherent generators using energy function p255
Hasanin, N.E., Kandil, M.S., and Farghal, S.A. see Kandil, M.S.
Hiyama, T., and Lim, C.M. see Lim, C.M.
Hogg, B.W., and Wu, Q.H. see Wu, Q.H.
Honorati, O., and Santini, E. New approach to the analysis of impulse voltage distribution in transformer windings p283
Hope, G.S., Pahalawatha, N.C., Malik, O.P., and Wong, K. see Pahalawatha, N.C.
Hsu, Y.-Y., Lee, Y.-S., Jien, J.-D., Liang, C.C., Chen, K.-K., Lai, T.-S., and Lee, T.-E. Operating reserve and reliability analysis of the Taiwan power system p349
Hsu, Y.-Y., and Cheng, C.-H. see Cheng, C.-H.
Hsu, Y.-Y., and Cheng, C.-H. Design of fuzzy power system stabilisers for multimachine power systems p233
Huang, M., Wang, L., Xiang, N., Wang, S., and Zhang, B. see Wang, L.
Humpage, W.D., and Nguyen, T.T. see Nguyen, T.T.

I

Imamura, T., and Ametani, A. Investigation of transient induced voltage to a communication line from an overhead power transission line p129
Irving, M.R., and Sterling, M.J.H. Optimal network tearing using simulated annealing p69

J

Jain, N.K., and Wadhwa, C.L. see Wadhwa, C.L.
Jamali, S., and Johns, A.T. see Johns, A.T.
Javanović, S.M. -Three level time decomposition quasi-static active and reactive power flow control p95
Jien, J.-D., Hsu, Y.-Y., Lee, Y.-S., Liang, C.C., Chen, K.-K., Lai, T.-S., and Lee, T.-E. see Hsu, Y.-Y.
Johns, A.T., and Aggarwal, R.K. see Aggarwal, R.K.
Johns, A.T., and Agrawal, P. New approach to power line protection based upon the detection of fault induced high frequency signals p307
Johns, A.T., and Jamali, S. Accurate fault location technique for power transmission lines p395
Jovanovic, M.S., Kostic, M.B., and Popovic, B.D. see Kostic, M.B.
Jovanović, S., Mrdja, S., and Lauby, M. Ranking and postponement of investments in planning the Serbian electric power networks p321

K

Kabir, S.M.L., Auckland, D.W., and Shuttleworth, R. see Auckland, D.W.
Kamwa, I., Viarouge, P., and Dickinson, J. Direct estimation of the generalised equivalent circuits of synchronous machines from short-circuit oscillographs p445
Kandil, M.S., Farghal, S.A., and Hasanin, N.E. Economic assessment of energy storage options in generation expansion planning p278
Kandil, M.S., Farghal, S.A., and Hasanin, N.E. Optimum operating policy for energy storage for an interconnected power system p291
Koch, D., Blez, B., and Gauthier, J. see Blez, B.
Kostic, M.B., Popovic, B.D., and Jovanovic, M.S. Numerical analysis of a class of foundation grounding systems p123

L

Lai, T.-S., Hsu, Y.-Y., Lee, Y.-S., Jien, J.-D., Liang, C.C., Chen, K.-K., and Lee, T.-E. see Hsu, Y.-Y.
Lattarulo, F., and DiLecce, F. Experimental analysis of DC corona on unipolar transmission lines p53
Lauby, M., Jovanović, S., and Mrdja, S. see Jovanović, S.
Lee, T.-E., Hsu, Y.-Y., Lee, Y.-S., Jien, J.-D., Liang, C.C., Chen, K.-K., and Lai, T.-S. see Hsu, Y.-Y.
Lee, Y.-S., Hsu, Y.-Y., Jien, J.-D., Liang, C.C., Chen, K.-K., Lai, T.-S., and Lee, T.-E. see Hsu, Y.-Y.
Leite da Silva, A.M., and Arienti, V.L. Probabilistic load flow by a multilinear simulation algorithm p276
Leithead, W.E. Dependence of performance of variable speed wind turbines on turbulence, dynamics and control p403
Liang, C.-C., Chen, B.-K., Chen, M.-S., and Shoults, R.R. see Chen, B.-K.
Liang, C.C., Hsu, Y.-Y., Lee, Y.-S., Jien, J.-D., Chen, K.-K., Lai, T.-S., and Lee, T.-E. see Hsu, Y.-Y.
Lim, C.M., and Hiyama, T. Self-tuning control scheme for stability enhancement of multimachine power systems p269
Lo, K.L., Zeng, P.L., Marchand, E., and Pinkerton, A. Modelling and state estimation of power plant steam turbines p80
Losi, A., De Martinis, V., Gagliardi, F., Mangoni, V., and Rossi, F. see De Martinis, V.

M

Machias, A.V., and Souflis, J.L. A fuzzy approach in the determination of unstable machines p115
Magdy, M.A., and Coowar, F. Frequency domain analysis of power system forced oscillations p261
Mahmoud, M. Experience results and techno-economic feasibility of using photovaltaic generators instead of diesel motors for water pumping from rural desert wells in Jordan p391
Malik, N.H., and Al-Bahrani, A.H. Influence of the terminal capacitor on the performance characteristics of a self excited induction generator p168
Malik, O.P., Pahalawatha, N.C., Hope, G.S., and Wong, K. see Pahalawatha, N.C.
Mangoni, V., De Martinis, V., Gagliardi, F., Losi, A., and Rossi, F. see De Martinis, V.
Marchand, E., Lo, K.L., Zeng, P.L., and Pinkerton, A. see Lo, K.L.
Mbamalu, G.A.N., and El-Hawary, M.E. see El-Hawary, M.E.
Miura, N., Sato, H., Narita, H., and Takaki, M. Automatic meter-reading system by power line carrier communications p25
Mrdja, S., Jovanović, S., and Lauby, M. see Jovanović, S.

N

Narita, H., Miura, N., Sato, H., and Takaki, M. see Miura, N.
Nguyen, T.T., and Humpage, W.D. Natural modes in SR-compensated transmission networks p365
Nguyen, T.T., and Humpage, W.D. SR bypass filter design based on natural mode identification p375

P

Pahalawatha, N.C., Hope, G.S., Malik, O.P., and Wong, K. Real time implementation of a MIMO adaptive power system stabiliser p186
Pinkerton, A., Lo, K.L., Zeng, P.L., and Marchand, E. see Lo, K.L.
Popovic, B.D., Kostic, M.B., and Jovanovic, M.S. see Kostic, M.B.

R

Rahim, A.H.M.A., and Haque, M.H. see Haque, M.H.
Rossi, F., De Martinis, V., Gagliardi, F., Losi, A., and Mangoni, V. see De Martinis, V.

S

Sachdev, M.S., Sidhu, T.S., and Wood, H.C. see Sidhu, T.S.
Salgado, R., Brameller, A., and Aitchison, P. Optimal power flow solutions using the gradient projection method: Part 2: Modelling of the power system equations p429
Santini, E., and Honorati, O. see Honorati, O.
Sato, H., Miura, N., Narita, H., and Takaki, M. see Miura, N.
Shoults, R.R., Chen, B.-K., Chen, M.-S., and Liang, C.-C. see Chen, B.-K.
Shuttleworth, R., Auckland, D.W., and Kabir, S.M.L. see Auckland, D.W.
Sidhu, T.S., Sachdev, M.S., and Wood, H.C. Microprocessor-based relay for protecting power transformers p436
Smith, J.R., and Cudworth, C.J. see Cudworth, C.J.
Souflis, J.L., and Machias, A.V. see Machias, A.V.
Sterling, M.J.H., and Irving, M.R. see Irving, M.R.

T

Takaki, M., Miura, N., Sato, H., and Narita, H. see Miura, N.
Tsai, D.T., Fong, C.C, and Wong, T.Y. see Fong, C.C
Tsao, T.P., and Chyn, C. Restriction of turbine blade vibrations in turbogenerators p339

U

Utsumi, I., Ametani, A., and Van Dommelen, D. see Ametani, A.

V

Van Dommelen, D., Ametani, A., and Utsumi, I. see Ametani, A.
Viarouge, P., Kamwa, I., and Dickinson, J. see Kamwa, I.

W

Wadhwa, C.L., and Jain, N.K. Multiple objective optimal load flow: a new perspective p13
Wang, L., Xiang, N., Wang, S., Zhang, B., and Huang, M. Novel decoupled power flow p1
Wang, S., Wang, L., Xiang, N., Zhang, B., and Huang, M. see Wang, L.
Whittington, H.W. Hydroelectric power in the USSR: historical development p343
Wong, K., Pahalawatha, N.C., Hope, G.S., and Malik, O.P. see Pahalawatha, N.C.
Wong, K.P., and Cheung, H.N. Thermal generator scheduling algorithm based on heuristic-guided depth-first search p33
Wong, T.Y., Fong, C.C, and Tsai, D.T. see Fong, C.C
Wood, H.C., Sidhu, T.S., and Sachdev, M.S. see Sidhu, T.S.
Wu, Q.H., and Hogg, B.W. Self tuning control for turbogenerators in multimachine power systems p146

X

Xiang, N., Wang, L., Wang, S., Zhang, B., and Huang, M. see Wang, L.

Z

Zeng, P.L., Lo, K.L., Marchand, E., and Pinkerton, A. see Lo, K.L.
Zhang, B., Wang, L., Xiang, N., Wang, S., and Huang, M. see Wang, L.

BREAKDOWN AND GAS DISCHARGES

Experimental analysis of DC corona on unipolar transmission lines. F. Lattarulo and F. DiLecce p53

CIRCUIT BREAKERS AND CIRCUIT BREAKING

Statistical processing of chopped currents and overvoltages in two types of sulphur hexafluoride breaker technology. B. Blez, J. Gauthier and D. Koch p63

COMMUNICATION SYSTEMS THEORY

Automatic meter-reading system by power line carrier communications. N. Miura, H. Sato, H. Narita and M. Takaki p25

COMPUTER APPLICATIONS

Thermal generator scheduling algorithm based on heuristic-guided depth-first search. K.P. Wong and H.N. Cheung p33

COMPUTER SIMULATION

Decomposed numerical observability investigation suitable for parallel processor implementation. M. Azzam p335

CONTROL EQUIPMENT AND APPLICATIONS

Self tuning control for turbogenerators in multimachine power systems. Q.H. Wu and B.W. Hogg p146

CONTROL SYSTEMS

Real time implementation of a MIMO adaptive power system stabiliser. N.C. Pahalawatha, G.S. Hope, O.P. Malik and K. Wong p186

CONTROL THEORY

Dependence of performance of variable speed wind turbines on turbulence, dynamics and control. W.E. Leithead p403

CONVERTORS

Optimal load flow for electrical power systems with multiterminal HVDC links. V. De Martinis, F. Gagliardi, A. Losi, V. Mangoni and F. Rossi p139

DESIGN

Natural modes in SR-compensated transmission networks. T.T. Nguyen and W.D. Humpage p365

SR bypass filter design based on natural mode identification. T.T. Nguyen and W.D. Humpage p375

ENERGY CONVERSION AND STORAGE

Economic assessment of energy storage options in generation expansion planning. M.S. Kandil, S.A. Farghal and N.E. Hasanin p278

Generation adequacy impacts of cogeneration sources. R. Billinton and A. Chowdhury p73

Optimum operating policy for energy storage for an interconnected power system. M.S. Kandil, S.A. Farghal and N.E. Hasanin p291

FAULT DETECTION

Field testing of a long radial transmission system and verification of computer simulation results. S.S. Choi p194

New approach to power line protection based upon the detection of fault induced high frequency signals. A.T. Johns and P. Agrawal p307

FAULT LOCATION

Accurate fault location technique for power transmission lines. A.T. Johns and S. Jamali p395

FILTERS AND FILTERING

Natural modes in SR-compensated transmission networks. T.T. Nguyen and W.D. Humpage p365

SR bypass filter design based on natural mode identification. T.T. Nguyen and W.D. Humpage p375

GENERATORS

Direct estimation of the generalised equivalent circuits of synchronous machines from short-circuit oscillographs. I. Kamwa, P. Viarouge and J. Dickinson p445

Economic assessment of energy storage options in generation expansion planning. M.S. Kandil, S.A. Farghal and N.E. Hasanin p278

Generation adequacy impacts of cogeneration sources. R. Billinton and A. Chowdhury p73

Generator model for Power system studies. D.W. Auckland, S.M.L. Kabir and R. Shuttleworth p383

Identification of coherent generators using energy function. M.H. Haque and A.H.M.A. Rahim p255

Interruptible load considerations in spinning reserve assessment of isolated and interconnected generating systems. N. Chowdhury and R. Billinton p159

Modelling and state estimation of power plant steam turbines. K.L. Lo, P.L. Zeng, E. Marchand and A. Pinkerton p80

Real time implementation of a MIMO adaptive power system stabiliser. N.C. Pahalawatha, G.S. Hope, O.P. Malik and K. Wong p186

Restriction of turbine blade vibrations in turbogenerators. T.P. Tsao and C. Chyn p339

Self tuning control for turbogenerators in multimachine power systems. Q.H. Wu and B.W. Hogg p146

Steam turbine generator shaft torque transients: a comparison of simulated and test results. C.J. Cudworth and J.R. Smith p327

Thermal generator scheduling algorithm based on heuristic-guided depth-first search. K.P. Wong and H.N. Cheung p33

HISTORY

Hydroelectric power in the USSR: historical development. H.W. Whittington p343

HYDROELECTRIC POWER GENERATION

Hydroelectric power in the USSR: historical development. H.W. Whittington p343

New approach for simulating an energy limited hydro unit. Q. Ahsan and M.R. Bhuiyan p359

INDUCTION MOTORS

Influence of the terminal capacitor on the performance characteristics of a self excited induction generator. N.H. Malik and A.H. Al-Bahrani p168

LOAD AND VOLTAGE REGULATION

Application of a power system stabiliser and a static VAR controller to a multimachine power system. C.-H. Cheng and Y.-Y. Hsu p8

Interruptible load considerations in spinning reserve assessment of isolated and interconnected generating systems. N. Chowdhury and R. Billinton p159

Optimal load flow for electrical power systems with multiterminal HVDC links. V. De Martinis, F. Gagliardi, A. Losi, V. Mangoni and F. Rossi p139

LONG-TERM PLANNING

Ranking and postponement of investments in planning the Serbian electric power networks. S. Jovanović, S. Mrdja and M. Lauby p321

MATHEMATICAL TECHNIQUES

A fuzzy approach in the determination of unstable machines. A.V. Machias and J.L. Souflis p115

Decomposed numerical observability investigation suitable for parallel processor implementation. M. Azzam p335

Design of fuzzy power system stabilisers for multimachine power systems. Y.-Y. Hsu and C.-H. Cheng p233

Hybrid three phase load flow. B.-K. Chen, M.-S. Chen, R.R. Shoults and C.-C. Liang p177

Hydro-thermal stochastic optimal power dispatch: A Newton's based approach. M.E. El-Hawary and G.A.N. Mbamalu p213

Identification of coherent generators using energy function. M.H. Haque and A.H.M.A. Rahim p255

Novel decoupled power flow. L. Wang, N. Xiang, S. Wang, B. Zhang and M. Huang p1

Optimal network tearing using simulated annealing. M.R. Irving and M.J.H. Sterling p69

Optimal power flow solutions using the gradient projection method: Part 2: Modelling of the power system equations. R. Salgado, A. Brameller and P. Aitchison p429

Optimal siting of power system stabilisers. A. Feliachi p101

Probabilistic load flow by a multilinear simulation algorithm. A.M. Leite da Silva and V.L. Arienti p276

Thermal generator scheduling algorithm based on heuristic-guided depth-first search. K.P. Wong and H.N. Cheung p33

MODULATION

Minimisation of uncharacteristic harmonics in HVDC convertors through firing angle modulation. F.A. Farret and L.L. Freris p45

NETWORKS

Optimal network tearing using simulated annealing. M.R. Irving and M.J.H. Sterling p69

NOISE AND INTERFERENCE

Investigation of transient induced voltage to a communication line from an overhead power transission line. T. Imamura and A. Ametani p129

NONLINEAR SYSTEMS

Natural modes in SR-compensated transmission networks. T.T. Nguyen and W.D. Humpage p365

OPTIMISATION

Hybrid three phase load flow. B.-K. Chen, M.-S. Chen, R.R. Shoults and C.-C. Liang p177

Identifying electrically weak and strong segments of a power system from a voltage stability viewpoint. O.O. Abadina and G.J. Berg p205

PHASING AND PHASE CONTROL

Study of super-bundle and low-reactance phasings on untransposed twin-circuit lines. A. Ametani, D. Van Dommelen and I. Utsumi p245

POLES AND ZEROS

Estimation of parameters in transient stability output. R. Betancourt p315

POWER ELECTRONICS

Novel decoupled power flow. L. Wang, N. Xiang, S. Wang, B. Zhang and M. Huang p1

Optimal load flow for electrical power systems with multiterminal HVDC links. V. De Martinis, F. Gagliardi, A. Losi, V. Mangoni and F. Rossi p139

POWER SYSTEM PROTECTION

Design of fuzzy power system stabilisers for multimachine power systems. Y.-Y. Hsu and C.-H. Cheng p233

Frequency domain analysis of power system forced oscillations. M.A. Magdy and F. Coowar p261

Numerical analysis of a class of foundation grounding systems. M.B. Kostic, B.D. Popovic and M.S. Jovanovic p123
Operating reserve and reliability analysis of the Taiwan power system. Y.-Y. Hsu, Y.-S. Lee, J.-D. Jien, C.C. Liang, K.-K. Chen, T.-S. Lai and T.-E. Lee p349
Optimal siting of power system stabilisers. A. Feliachi p101

POWER SYSTEMS AND PLANT

-Three level time decomposition quasi-static active and reactive power flow control. S.M. Javanović p95
A fuzzy approach in the determination of unstable machines. A.V. Machias and J.L. Souflis p115
A modified decoupled linear programming technique for power system state estimation. S.A. Farghal and M. El-Saidy p239
Application of a power system stabiliser and a static VAR controller to a multimachine power system. C.-H. Cheng and Y.-Y. Hsu p8
Decomposed numerical observability investigation suitable for parallel processor implementation. M. Azzam p335
Examination of severe contingencies in a small area of a large composite power system using adequacy equivalents. R. Billinton and S.K. Agarwal p107
Hydro-thermal stochastic optimal power dispatch: A Newton's based approach. M.E. El-Hawary and G.A.N. Mbamalu p213
Optimal network tearing using simulated annealing. M.R. Irving and M.J.H. Sterling p69
Optimum operating policy for energy storage for an interconnected power system. M.S. Kandil, S.A. Farghal and N.E. Hasanin p291
Probabilistic load flow by a multilinear simulation algorithm. A.M. Leite da Silva and V.L. Arienti p276
Ranking and postponement of investments in planning the Serbian electric power networks. S. Jovanović, S. Mrdja and M. Lauby p321
Self-tuning control scheme for stability enhancement of multimachine power systems. C.M. Lim and T. Hiyama p269

POWER TRANSMISSION AND DISTRIBUTION

Automatic meter-reading system by power line carrier communications. N. Miura, H. Sato, H. Narita and M. Takaki p25
Examination of severe contingencies in a small area of a large composite power system using adequacy equivalents. R. Billinton and S.K. Agarwal p107
Experimental analysis of DC corona on unipolar transmission lines. F. Lattarulo and F. DiLecce p53
Hybrid three phase load flow. B.-K. Chen, M.-S. Chen, R.R. Shoults and C.-C. Liang p177
Identifying electrically weak and strong segments of a power system from a voltage stability viewpoint. O.O. Abadina and G.J. Berg p205
Minimisation of uncharacteristic harmonics in HVDC convertors through firing angle modulation. F.A. Farret and L.L. Freris p45
Multiple objective optimal load flow: a new perspective. C.L. Wadhwa and N.K. Jain p13

RELAYS

Microprocessor-based relay for protecting power transformers. T.S. Sidhu, M.S. Sachdev and H.C. Wood p436

RELIABILITY

Evaluating the approximate probability distributions of load point reliability indices in power distribution networks. C.C Fong, T.Y. Wong and D.T. Tsai p174

SIMULATION

A modified decoupled linear programming technique for power system state estimation. S.A. Farghal and M. El-Saidy p239
Estimation of parameters in transient stability output. R. Betancourt p315
Generator model for Power system studies. D.W. Auckland, S.M.L. Kabir and R. Shuttleworth p383
Hydro-thermal stochastic optimal power dispatch: A Newton's based approach. M.E. El-Hawary and G.A.N. Mbamalu p213
Modelling and state estimation of power plant steam turbines. K.L. Lo, P.L. Zeng, E. Marchand and A. Pinkerton p80
New approach for simulating an energy limited hydro unit. Q. Ahsan and M.R. Bhuiyan p359
New approach to the analysis of impulse voltage distribution in transformer windings. O. Honorati and E. Santini p283
Optimal power flow solutions using the gradient projection method: Part 2: Modelling of the power system equations. R. Salgado, A. Brameller and P. Aitchison p429
Probabilistic load flow by a multilinear simulation algorithm. A.M. Leite da Silva and V.L. Arienti p276
Steam turbine generator shaft torque transients: a comparison of simulated and test results. C.J. Cudworth and J.R. Smith p327

SOLAR POWER

Experience results and techno-economic feasibility of using photovaltaic generators instead of diesel motors for water pumping from rural desert wells in Jordan. M. Mahmoud p391

STABILITY

A fuzzy approach in the determination of unstable machines. A.V. Machias and J.L. Souflis p115
Design of fuzzy power system stabilisers for multimachine power systems. Y.-Y. Hsu and C.-H. Cheng p233
Estimation of parameters in transient stability output. R. Betancourt p315
Identifying electrically weak and strong segments of a power system from a voltage stability viewpoint. O.O. Abadina and G.J. Berg p205
Self-tuning control scheme for stability enhancement of multimachine power systems. C.M. Lim and T. Hiyama p269

SYSTEM PROTECTION

Identification of coherent generators using energy function. M.H. Haque and A.H.M.A. Rahim p255
New approach to power line protection based upon the detection of fault induced high frequency signals. A.T. Johns and P. Agrawal p307
Statistical processing of chopped currents and overvoltages in two types of sulphur hexafluoride breaker technology. B. Blez, J. Gauthier and D. Koch p63

TRANSFORMERS

Microprocessor-based relay for protecting power transformers. T.S. Sidhu, M.S. Sachdev and H.C. Wood p436
New approach to the analysis of impulse voltage distribution in transformer windings. O. Honorati and E. Santini p283

TRANSMISSION AND DISTRIBUTION PLANT

Evaluating the approximate probability distributions of load point reliability indices in power distribution networks. C.C Fong, T.Y. Wong and D.T. Tsai p174
Field testing of a long radial transmission system and verification of computer simulation results. S.S. Choi p194

TRANSMISSION LINES

Accurate fault location technique for power transmission lines. A.T. Johns and S. Jamali p395
Digital differential relaying scheme for teed circuits based on voltage and current signal comparison. R.K. Aggarwal and A.T. Johns p414
Investigation of transient induced voltage to a communication line from an overhead power transission line. T. Imamura and A. Ametani p129
Natural modes in SR-compensated transmission networks. T.T. Nguyen and W.D. Humpage p365
New approach to power line protection based upon the detection of fault induced high frequency signals. A.T. Johns and P. Agrawal p307

VIBRATION

Restriction of turbine blade vibrations in turbogenerators. T.P. Tsao and C. Chyn p339